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TOPEX Radar Altimeter Engineering Assessment Report Update Side B Turn-On to January 1, 2005

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Section 1

Introduction

1.1 Identification of Document

This is the twelfth in a series of TOPEX Radar Altimeter Engineering Assessment Reports.

The initial TOPEX Radar Altimeter Engineering Assessment Report, in February 1994, presented performance results for the NASA Radar Altimeter on the TOPEX/POSEIDON spacecraft, from the time of its launch in August 1992 to February 1994. Since the time of that initial report and prior to this report, there have been ten interim supplemental Engineering Assessment Reports, issued in March 1995, May 1996, March 1997, June 1998, August 1999, September 2000, June 2001, March 2002, May 2003, and again in April 2004.

The sixth supplement in September 2000 was the first assessment report that addressed Side B performance, and presented the altimeter performance from the turn-on of Side B until the end of calendar year 1999. This report extends the performance assessment of Side B to the end of calendar year 2004 and includes the performance assessment of Jason-1, the TOPEX follow-on mission, launched on December 7, 2001.

Over the years since TOPEX/POSEIDON launch, we have performed a large variety of TOPEX performance studies; Appendix A provides an accumulative index of those studies. As the performance database has expanded, and as analysis tools and techniques continue to evolve, the longer-term trends of the altimeter data have become more apparent. The updated findings are presented here.